

Projector Specifications

General

Type of display	Poly-silicon Thin Film Transistor (TFT)
Size of liquid crystal panels	Diagonal: 1.3 inches (33.6 mm)
Lens	F=2.0–2.3, f=55–72 mm
Resolution	PowerLite 5350: SVGA, 800 × 600 pixels PowerLite 7250/7350: XGA, 1024 × 768 pixels
Color reproduction	24 bit, 16.7 million colors
Brightness	PowerLite 5350: 1400 lumens (ANSI) PowerLite 7250: 1200 lumens (ANSI) PowerLite 7350: 1500 lumens (ANSI)
Image size	Wide angle: 23 to 300 inches (at 3.9 to 40.6 feet distance) Tele angle: 23 to 230 inches (at 5.1 to 54 feet distance)
Projection distance	3.18 to 54.8 feet (1.18 to 16.7 meters)
Projection methods	Front, rear, upside-down (ceiling mount)
Internal speaker system	3 × 3 W stereo output 2 × 3 W 8 (ohm) speakers
Optical aspect ratio	4:3 (horizontal:vertical)
Zoom ratio	1:1.3
Tilt angle	0° to 12°
Supported video interface standards	NTSC, PAL, PAL-M, PAL-N, SECAM

Projection Lamp

Type	UHE (Ultra High Efficiency)
Power consumption	150 W
Lamp life	1500 to 2000 hours (typical)
Part number	ELPLP09

Remote Control

Range	32.8 feet (10 meters)
Batteries	Alkaline AA (2)

Mouse Compatibility

Supports PS/2, USB, serial, ADB

Remote IR ReceiverSupports EPSON remote IR receiver,
10-foot cable (typical for rear screen
projection)**Mechanical**

Height	5.1 inches (129 mm), including feet
Width	11.8 inches (300 mm)
Depth	15.8 inches (400 mm), including lens
Weight	13.8 lb (6.2 kg)

Electrical

Rated frequency	50/60 Hz
Power supply	100 to 120 VAC, 2.4 A 200 to 240 VAC, 1.2 A
Power consumption	Operating: 200 W Standby: 8.4 W

Environmental

Temperature	Operating: 41 to 104° F (5 to 40° C), non-condensing Storage: 14 to 140° F (-10 to 60° C), non-condensing
Humidity	Operating: 20 to 80% RH, non-condensing Storage: 10 to 90% RH, non-condensing

Safety

United States	FCC Part 15J Class B UL1950 Rev. 3
Canada	DOC SOR/88-475 CSA C22.2 No. 950 Rev. 3

Supported Monitor Displays

Here are the display formats supported by the projector:

Mode	Resolution	Frequency H(KHz)/V(Hz)	Dot (MHz)
VGACGA	640 × 400	31.46 / 70	25.175
VGAEGA	640 × 350	31.46 / 70	25.175
NEC400	640 × 400	24.83 / 56.65	21.053
VGA60	640 × 480	31.469 / 59.94	25.175
VGA72	640 × 480	37.861 / 72.809	31.5
VGA75	640 × 480	37.5 / 75	31.5
VGA85	640 × 480	48.269 / 85.008	36

Mode	Resolution	Frequency H(KHz)/V(Hz)	Dot (MHz)
SVGA56	800 × 600	35.156 / 56.25	36
SVGA60	800 × 600	37.879 / 60.317	40
SVGA72	800 × 600	48.077 / 72.188	50
SVGA75	800 × 600	46.875 / 75	49.5
SVGA85	800 × 600	53.674 / 85.061	56.25
XGA43i	1024 × 768	35.522 / 86.958	44.9
XGA60	1024 × 768	48.363 / 60.004	65
XGA70	1024 × 768	56.476 / 70.069	75
XGA75	1024 × 768	60.023 / 75.029	78.75
XGA85	1024 × 768	68.677 / 84.997	94.5
SXGA1_70	1152 × 864	63.851 / 70.012	94.5
SXGA1_75	1152 × 864	67.5 / 75	108
SXGA1_85	1152 × 864	77.094 / 84.002	121.5
SXGA2_60	1280 × 960	60 / 60	108
SXGA2_75	1280 × 960	75 / 75	126
SXGA2_85	1280 × 960	85.938 / 85.002	148.5
SXGA3_43i	1280 × 1024	46.433 / 86.871	78.75
SXGA3_60	1280 × 1024	63.981 / 60.02	108
SXGA3_75	1280 × 1024	79.976 / 75.025	135
SXGA_85	1280 × 1024	91.146 / 85.024	157.5
UXGA48i	1600 × 1200	62.5 / 96.080	135
UXGA60	1600 × 1200	75 / 60	162
UXGA65	1600 × 1200	81.25 / 65	175.5
UXGA70	1600 × 1200	87.5 / 70	189
UXGA75	1600 × 1200	93.75 / 75	202.5
MACLC13	640 × 480	34.975 / 66.62	31.33
MACII13	640 × 480	35 / 66.67	30.24
MAC16	832 × 624	49.725 / 74.55	57.28
MAC19-60	1024 × 768	48.193 / 59.28	64
MAC19	1024 × 768	60.241 / 74.93	80
MAC21	1152 × 870	68.682 / 75.062	100
HDTV480P (ANSI/SMPTE)	720 × 483	31.469 / 59.940	27
HDTV480P (ATSC)	704 × 480	31.469 / 59.940	27
HDTV480I (ANSI/SMPTE)	720 × 487	15.734 / 59.940	13.5
HDTV480I (ATSC)	704 × 480	15.734 / 59.940	13.5
HDTV720P (SMPTE)	1280 × 720	44.955 / 59.940	74.176
HDTV1080I (ANSI/SMPTE)	1920 × 1080	67.433 / 59.940	148.352
HDTV1080I (ANSI/SMPTE)	1920 × 1080	33.716 / 59.940	74.176
NTSC (SXGA)	1366 × 438	15.734 / 60	28.486
NTSC (XGA)	1024 × 438	15.734 / 60	2.890
PAL (SXGA)	1366 × 512	15.625 / 50	28.846
PAL (XGA)	1024 × 512	15.625 / 50	21.154
SECAM (SXGA)	1366 × 512	15.625 / 50	28.846
SECAM (XGA)	1024 × 512	15.625 / 50	21.154

Note: The frequencies of some computers may not allow the image to be displayed correctly.

Computer 1 and 2 and Computer Out Connector Pin Assignments

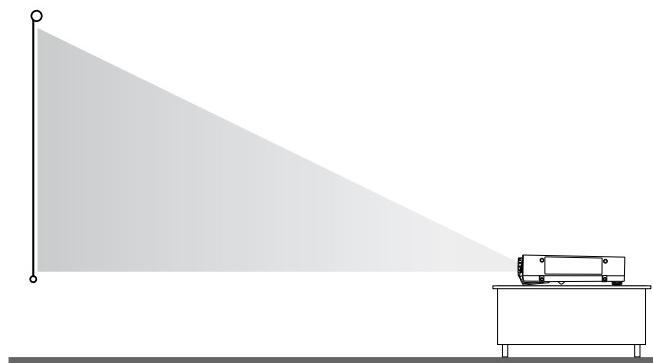
The Computer 1 and 2 and Computer Out connectors are female video RGB, 15-pin micro-D-style connectors. The pin assignments are:

Input pin	Computer Out connector signals	Computer 1 and 2 connector signals
1	Red out / red video	Red video
2	Green out / green video	Green video
3	Blue out / blue video	Blue video
4	Reserved	Monitor (ID bit 2)
5	GND	GND
6	GND	Red video GND
7	GND	Green video GND
8	GND	Blue video GND
9	Reserved	+5 V
10	GND	Synchronous GND
11	Reserved	Monitor (ID bit 0)
12	Reserved	SDA
13	Horizontal sync	Horizontal sync
14	Vertical sync	Vertical sync
15	Vertical sync	Reserved

Projector Placement Guidelines

To get the best results when projecting your images, it is important to position the projector at the proper height and distance relative to the screen.

When projecting from a table or desk, place the projector so the lens is aligned as closely as possible with the bottom of your screen:



When projecting from the ceiling, align the lens as closely as possible with the top of your screen:



Calculating Image Size and Projection Distance

The distance between the projector and the screen determines the image size. To determine the exact distance required for a particular image size (or to determine the size of an image at a particular distance), use the following formulas for the standard, long throw, and fixed wide angle lenses. (The size of the image can also be changed by rotating the zoom ring.)

Standard Lens Calculations

To determine the minimum and maximum diagonal size of an image when you know the projection distance:

Inches:

$$\text{Maximum diagonal size} = (0.6124 \times \text{projection distance}) + 1.5264$$

$$\text{Minimum diagonal size} = (0.4556 \times \text{projection distance}) + 1.1410$$

Centimeters:

$$\text{Maximum diagonal size} = (0.6124 \times \text{projection distance}) + 3.8771$$

$$\text{Minimum diagonal size} = (0.4556 \times \text{projection distance}) + 2.8981$$

To determine the projection distance when you know the diagonal size of the screen image:

Inches:

$$\text{Maximum projection distance} = (2.1949 \times \text{diagonal size}) - 2.5044$$

$$\text{Minimum projection distance} = (1.6328 \times \text{diagonal size}) - 2.4923$$

Centimeters:

$$\text{Maximum projection distance} = (2.1949 \times \text{diagonal size}) - 6.3612$$

$$\text{Minimum projection distance} = (1.6328 \times \text{diagonal size}) - 6.3304$$

For example, here are the measurements for three installations:

Image size (diagonal)	Horizontal distance from projector to screen	
	Minimum	Maximum
300 inches* (762 cm)	487.3 inches (12.4 m)	656.0 inches (16.7 m)
200 inches (508 cm)	324.1 inches (8.2 m)	436.5 inches (11.1 m)
100 inches (254 cm)	160.8 inches (4.1 m)	217.1 inches (5.5 m)

* For an image size of 300 inches, the projector may be up to 54 feet away from the screen, depending on the setting of the zoom ring.

Long Throw Zoom Lens Calculations

If you are using the optional long throw zoom lens, use the following formulas.

To determine the minimum and maximum diagonal size of an image when you know the projection distance:

Inches:

$$\text{Maximum diagonal size} = (0.4742 \times \text{projection distance}) + 3.2489$$

$$\text{Minimum diagonal size} = (0.2849 \times \text{projection distance}) + 1.8968$$

Centimeters:

$$\text{Maximum diagonal size} = (1.2045 \times \text{projection distance}) + 8.2521$$

$$\text{Minimum diagonal size} = (0.7236 \times \text{projection distance}) + 4.8179$$

To determine the projection distance when you know the diagonal size of the screen image:

Inches:

$$\text{Maximum projection distance} = (3.5094 \times \text{diagonal size}) - 6.6568$$

$$\text{Minimum projection distance} = (2.1090 \times \text{diagonal size}) - 6.8519$$

Centimeters:

$$\text{Maximum projection distance} = (8.9139 \times \text{diagonal size}) - 16.9083$$

$$\text{Minimum projection distance} = (5.3569 \times \text{diagonal size}) - 17.4038$$

Fixed Wide Angle Lens Calculations

If you are using the optional fixed wide angle lens, use the following formulas.

To determine the minimum and maximum diagonal size of an image when you know the projection distance:

Inches:

$$\text{Maximum diagonal size} = (0.730 \times \text{projection distance}) + 3.919$$

$$\text{Minimum diagonal size} = (0.616 \times \text{projection distance}) + 3.050$$

Centimeters:

$$\text{Maximum diagonal size} = (1.8542 \times \text{projection distance}) + 9.9542$$

$$\text{Minimum diagonal size} = (1.5646 \times \text{projection distance}) + 7.7470$$

To determine the projection distance when you know the diagonal size of the screen image:

Inches:

$$\text{Maximum projection distance} = (1.619 \times \text{diagonal size}) - 4.702$$

$$\text{Minimum projection distance} = (1.367 \times \text{diagonal size}) - 5.640$$

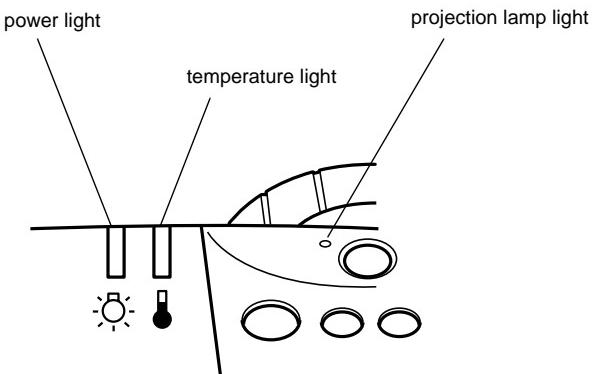
Centimeters:

$$\text{Maximum projection distance} = (4.1122 \times \text{diagonal size}) - 11.9430$$

$$\text{Minimum projection distance} = (3.4721 \times \text{diagonal size}) - 14.3256$$

Projector Status Lights

The status lights on top of the projector tell you the projector's operating status.



Caution: A red light warns you if a serious problem occurs.

Power Light

Light status	Meaning
Steady orange	Sleep mode. (The projector is plugged in, but not projecting.)
Steady green	Power and lamp are on.
Flashing green	The projector is warming up. Allow about 30 seconds.
Flashing orange	The projector is cooling down.
Off	The power cord is not plugged in, there is no power to the electrical outlet, or there is an internal projector problem.

Projection Lamp Light

Light status	Meaning
Orange and red flashing alternately	Projection lamp needs replacing.
Steady red	Projection lamp has burned out. Replace lamp.
Flashing red	Problem with projection lamp or lamp power supply.
Off	Lamp is functioning normally.

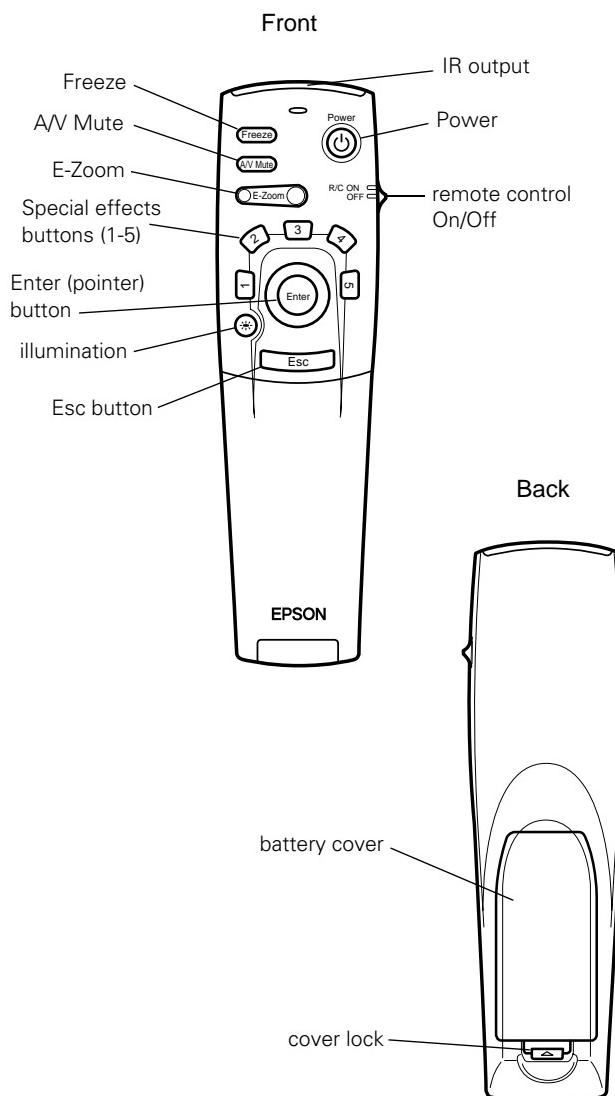
Temperature Light

Light status	Meaning
Flashing orange	Projector is too hot.
Steady red	Projector has turned off automatically because of overheating.
Flashing red	Problem with the cooling fan or temperature sensor, causing overheating.
Off	The projector is functioning normally.

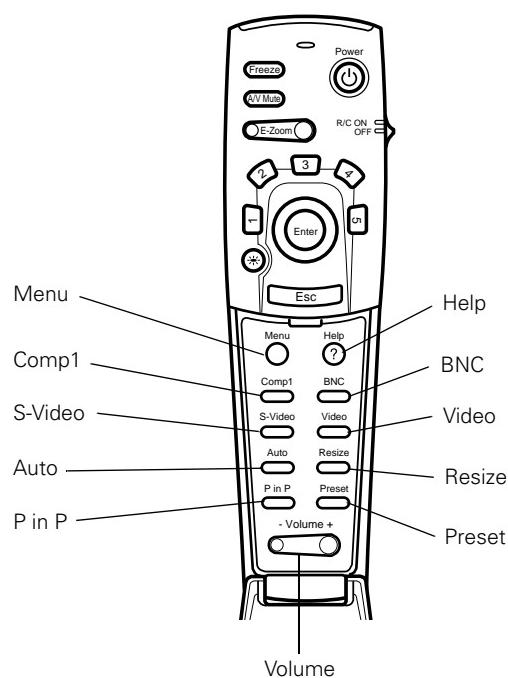
Using the Remote Control

The remote control uses a line-of-sight infrared signal. To use the remote control, point it towards one of the infrared receivers located at the front and back of the projector. You can use the remote control up to about 32.8 feet (10 meters) from the projector. (This distance may be shorter if the remote control batteries are low.) You must also be within a $\pm 30^\circ$ angle from the front or rear receiver.

Note: The projector may not respond to remote control commands in these conditions: ambient light is too bright; a certain type of fluorescent light is present; a strong light source (such as direct sunlight) shines into the infrared receiver; or other equipment emitting infrared energy is present (such as a radiant room heater). Correct these conditions to use the remote control or control the projector from a computer.



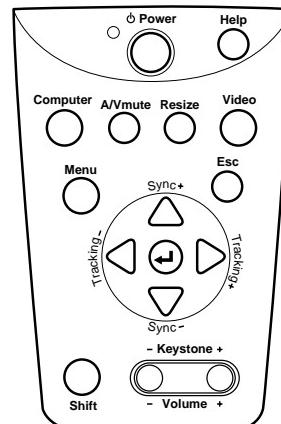
Open the cover just below the Esc button to access additional remote control commands.



This table summarizes the functions on the remote control.

Button	Function
Power	Starts or stops the projector.
Freeze	Keeps the current computer or video image on the screen.
A/V Mute	Turns off the audio and video, displaying either the black, blue or user logo background.
E-Zoom	Enlarges or reduces the image size from 1x to 4x. Pressing the right side of the button enlarges the image, pressing the left side of the button reduces the image. To display a portion of an enlarged image which is outside the display area, press the Enter button and scroll the image to the desired location.
RC On/Off	Turns the remote control on or off.
Effects buttons	Use to display preprogrammed special effects. Effects can be modified using the ELP Link IV software, or control panel menu options.
Enter (pointer button)	Use the Enter button to navigate the menus or use the remote as a mouse pointer when the projector is connected to the computer with the main cable and the mouse cable. When the image source is Computer, the Enter button acts as a mouse left-click.
Illumination	Illuminates all buttons on the remote control for 10 seconds.
Esc	Stops the current function. Pressing Esc while viewing a menu or the online help displays the previous screen or menu. When the image source is Computer, the Esc button acts as a mouse right-click.
Menu	Displays or hides the menu.
Comp1	Switches to the Computer 1 image.
S-Video	Switches to the S-Video image.
Auto	Optimizes the computer image.
P in P	Displays a video or S-video image in a subscreen on the main display. Use the Enter button to reposition the Picture in Picture (P in P) screen, or the E-Zoom button to enlarge or reduce the image. Changes made to the P in P screen location and size are automatically carried over to the next P in P session.
Help	Displays the online help menu.
BNC	Switches to the Computer2/BNC image.
Video	Switches to the Video image.
Resize	Switches the display dot mode and resize mode for VGA, XGA, SVGA, and SXGA input. You cannot resize the image if the input resolution matches the output resolution of the projector (SVGA for the PowerLite 5350, or XGA for the PowerLite 7250 and 7350).
Preset	Saves and recalls up to five different session settings (resolution, tracking, sync signal and position). To save the current session settings, press the Preset button and it will be assigned the next available number, 1 through 5. To recall a setting, press the Preset button a second time and move to the desired session number. To overwrite a saved setting, move to the setting you want to replace and press Enter. When the confirmation message displays, choose Yes and press Enter.
- Volume +	Adjusts the volume.

Using the Control Panel



You can use the control panel to control the projector instead of the remote control. However, you can program and access the custom features only with the remote control. The following table summarizes the functions on the control panel.

Button	Function
Power	Starts or stops projection.
Help	Displays the online help menu.
Computer	Switches between Computer 1 and Computer 2. (When the Computer 2/BNC switch on the back of the projector is set to BNC, the source is switched to 5BNC.)
A/V Mute	Turns off the audio and video, displaying the black, blue, or user logo background.
Resize	Switches the display dot mode and resize mode for VGA, XGA, SVGA, and SXGA input. You cannot resize the image if the input resolution matches the output resolution of the projector (SVGA for the PowerLite 5350, or XGA for the PowerLite 7250 and 7350).
Video	Switches to the video image. Pressing the button once switches to composite video, pressing it twice switches to S-Video.
Menu	Displays or hides the menu.
Esc	Stops the current function. Pressing Esc while viewing a menu or the online help displays the previous screen or menu. When the image source is Computer, the Esc button acts as a mouse right-click.
Up, down arrows (Sync+/Sync-)	Synchronizes the computer's graphic signal. Use these buttons to adjust an overall image that is fuzzy or streaked, or to select menu items during menu operations. Allows movement or selection of a menu, if a menu is displayed.
Left, right arrows (tracking-/tracking+)	Matches the projector's internal clock to various computer graphic signals (tracking adjustment). Use these buttons to adjust an image with vertical fuzzy lines, or to change numeric settings during menu operations. Allows movement of a menu, if a menu is displayed.

Button	Function
Enter	Selects a menu option or the next menu/help screen. Pressing Enter when no menu or help screen is displayed optimizes the computer image.
Shift	Pressing the shift and Keystone buttons at the same time increases or decreases the sound volume.
- Keystone +	Adjusts a trapezoid distorted image to normal.
- Volume +	Adjusts the volume when used in conjunction with the Shift button.

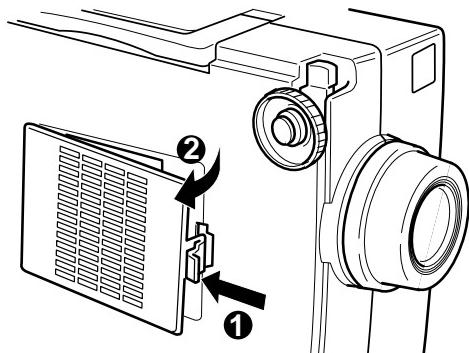
Cleaning the Air Filter

Clean the air filter at the bottom of the projector after every 100 hours of use. If it is not cleaned periodically, it can become clogged with dust, preventing proper ventilation. This can cause overheating and damage the projector. To clean the air filter, follow these steps:

1. Turn off the projector and unplug the power cable.
2. Turn the projector on its side so that the handle is on top and you can access the filter easily.

Note: Standing the projector with the handle at the top keeps dust from getting inside the projector housing.

3. Pull the filter cover tab to release the filter cover. Remove the cover.



4. The filter is attached to the inside of the filter cover. It is recommended that you use a small vacuum cleaner designed for computers and other office equipment to clean the filter. If you don't have one, use a dry, lint-free cloth.

If the dirt is difficult to remove or the filter is torn, replace it.

5. Replace the filter cover when you're done.

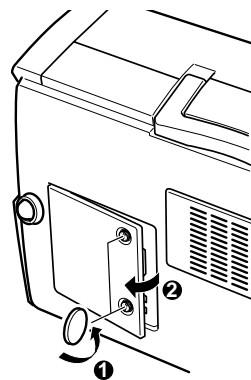
Replacing the Lamp

The projection lamp typically lasts for about 1500 to 2000 hours of use. It is time to replace the lamp when:

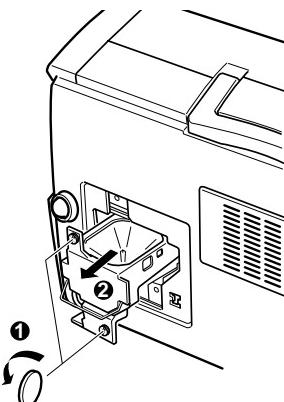
- The projected image gets darker or starts to deteriorate.
- The projection lamp indicator is either red, or flashing orange and red alternately.
- The message **LAMP REPLACE** appears on the screen when the projection lamp comes on.

Warning: Let the lamp cool before replacing it. Also, do not touch the glass portion of the lamp assembly. Touching the glass portion of the lamp will result in premature lamp failure.

1. Turn off the projector and unplug the power cable.
2. Turn the projector over so you can access the lamp cover.
3. Use a screwdriver, coin, or similar object to loosen the two retaining screws on the lamp cover. When the screws are loose, lift off the lamp cover. (You cannot remove these screws from the cover.)



4. Use a screwdriver, coin, or similar object to loosen the two screws holding the lamp unit in position. (You cannot remove these screws completely.)



5. Lift up the handle and pull out the lamp unit.

6. Gently insert the new lamp unit by lowering it into position. Make sure it's inserted securely. Tighten the screws on the new lamp unit.
7. Replace the lamp cover and tighten the cover screws. (Make sure the lamp cover is securely fastened. The projector turns itself off if the lamp cover is open.)

Information Reference List

Engineering Change Notices

None.

Technical Information Bulletins

None.

Product Support Bulletins

None.

Related Documentation

CPD 8871	EPSON PowerLite 5350/7250/7350 User's Guide
CPD 8872	EPSON PowerLite 5350/7250/7350 Portable Guide
SM-ELP5350/7X50	EPSON PowerLite 5350/7250/7350 Multimedia Projector Service Manual
PL-ELP5350	EPSON PowerLite 5350 Multimedia Projector Parts Price List
PL-ELP7250	EPSON PowerLite 7250 Multimedia Projector Parts Price List
PL-ELP7350	EPSON PowerLite 7350 Multimedia Projector Parts Price List